Proposed by Code Interpretation Committee:

Date: March 1, 2002

Item Number: 1
Code Section: 1629.4.2
Proposed Amendment (strikeout/underline format):

1629.4.2. Seismic Zone 4 near-source factor. In Seismic Zone 4, each site shall be assigned a near-source factor in accordance with Table 16-S and the Seismic Source Type set forth in Table 16-U. The value of N_a used in determining C_a need not exceed 1.1 for structures complying with all the following conditions:

1. The soil profile type is S_A, S_B, S_C or S_D.

2. $\rho = 1.0$.

3. Except in single-story structures, Group R, Division 3 and Group U, Division 1 Occupancies, moment frame systems designated as part of the lateral-force-resisting system shall be special moment-resisting frames.

4. The provisions in ~~exceptions to Section 2213.7.5~~ Sections 9.6a and 9.6b of AISC - Seismic Part 1 shall not apply, except for columns in one-story buildings or columns at the top story of multistory buildings.

5. None of the following structural irregularities is present: Type 1, 4 or 5 of Table 16-L, and Type 1 or 4 of Table 16-M.

Recommendation: Approve

Reason for amendment:

Sections 9.6a and 9.6b of AISC - Seismic Part 1 exempts strong-column/weak-beam requirements under certain load conditions and configurations for steel Special and Intermediate moment frames. 97 UBC Section 1629.4.2 item 4 require that structures located near fault shall comply with SC/WB. The revision reflects the same requirements as in 1997 AISC-Seismic. This is consistent with SEAOC Seismology position.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:
Date: March 1, 2002
Item 2.

Table 16-N of the California Building Code is amended to read as follows:

TABLE 16-N – STRUCTURAL SYSTEMS [1]

BASIC STRUCTURAL SYSTEM[2]	LATERAL-FORCE-RESISTING SYSTEM DESCRIPTION	*R*	*? ?*	*HEIGHT LIMIT FOR SEISMIC ZONES 3 AND 4 (feet)* *x 304.8 for mm*
1. Bearing wall system	*1. Light-framed walls with shear panels*			
	a. Wood structural panel walls for structures three stories or less	*5.5*	*2.8*	*65*
	b. All other light-framed walls	*4.5*	*2.8*	*65*
	2. Shear walls			
	a. Concrete	*4.5*	*2.8*	*160*
	b. Masonry	*4.5*	*2.8*	*160*
	3. Light steel-framed bearing walls with tension-only bracing	*2.8*	*2.2*	*65*
	4. Braced frames where bracing carries gravity load	*4.4*	*2.2*	*160*
	a. Steel	*2.8*	*2.2*	*- [3]*
	b. Concrete[3]	*2.8*	*2.2*	*65*
	c. Heavy timber			
2. Building frame system	*1. Steel eccentrically braced frame (EBF)*	*7.0*	*2.8*	*240*
	2. Light-framed walls with shear panels.			
	a. Wood structural panel walls for structures three stories or less	*6.5*	*2.8*	*65*
	b. All other light-framed walls	*5.0*	*2.8*	*65*
	3. Shear walls			
	a. Concrete	*5.5*	*2.8*	*240*
	b. Masonry	*5.5*	*2.8*	*160*
	4. Ordinary braced frames			
	a. Steel [6]	*5.6*	*2.2*	*35 [6] ~~160~~*
	b. Concrete[3]	*5.6*	*2.2*	*- [3]*
	c. Heavy timber	*5.6*	*2.2*	*65*
	5. Special concentrically braced frames			
	a. Steel	*6.4*	*2.2*	*240*

3. Moment-resisting frame system	*1. Special moment-resisting frame (SMRF)* *a. Steel* *b. Concrete[4]* *2. Masonry moment-resisting wall frame (MMRWF)* *3. ~~Concrete i~~ Intermediate moment-resisting frame (IMRF)[5]* *a. Steel[6]* *b. Concrete[5]* *4. Ordinary moment-resisting frame (OMRF)* *a. Steel [6]* *b. Concrete[8]* *5. Special truss moment frames of steel (STMF)*	*8.5* *8.5* *6.5* *4.5* *5.5* *3.5* *3.5* *6.5*	*2.8* *2.8* *2.8* *2.8* *2.8* *2.8* *2.8* *2.8*	*N.L.* *N.L.* *160* *35[6]* *- [3]* *35[6] ~~160~~* *- [3]* *240*
4. Dual systems	*1. Shear walls* *a. Concrete with SMRF* *b. Concrete with steel OMRF (Not Permitted)* **c. Concrete with concrete IMRF [5]** **d. Masonry with SMRF** **e. Masonry with steel OMRF *(Not Permitted)*** **f. Masonry with concrete IMRF [3]** **g. Masonry with masonry MMRWF** **2. Steel EBF** **a. With steel SMRF** **b. With steel OMRF *(Not Permitted)*** **3. Ordinary braced frames *(Not Permitted)*** **~~a. Steel with steel SMRF~~** **~~b. Steel with steel OMRF~~** **~~c. Concrete with concrete SMRF[3]~~** **~~d. Concrete with concrete IMRF[3]~~** **4. Special concentrically braced frames** **a. Steel with steel SMRF** **b. Steel with steel OMRF *(Not Permitted)*** **5. Steel IMRF *(Not permitted)***	**8.5** **~~4.2~~** **6.5** **5.5** **~~4.2~~** **4.2** **6.0** **8.5** **~~4.2~~** **~~6.5~~** **~~4.2~~** **~~6.5~~** **~~4.2~~** **7.5** **~~4.2~~**	**2.8** **~~2.8~~** **2.8** **2.8** **~~2.8~~** **2.8** **2.8** **2.8** **~~2.8~~** **~~2.8~~** **~~2.8~~** **~~2.8~~** **~~2.8~~** **2.8** **~~2.8~~**	**N.L.** **~~160~~** **~~160~~ - [5]** **160** **~~160~~** **- [3]** **160** **N.L.** **~~160~~** **~~N.L.~~** **~~160~~** **- [3]** **- [3]** **N.L.** **~~160~~**
5. Cantilevered column building systems	**1. Cantilevered column elements**	**2.2**	**2.0**	**35[7]**
6. Shear wall-frame interaction systems	**1. Concrete[8]**	**5.5**	**2.8**	**160**
7. Undefined systems	**See Section 1629.6.7 and 1629.9.2**	**-**	**-**	**-**

N.L.– no limit

[1] See Section 1630.4 for combination of structural systems.

[2] **Basic structural systems are defined in Section 1629.6.**
[3] **Prohibited in Seismic Zones 3 and 4.**
[4] **Includes precast concrete conforming to Section 1921.2.7.**
[5] **Prohibited in Seismic Zones 3 and 4, except as permitted in Section 1634.2.**
[6] **In Seismic Zone 4 Steel IMRF, OMRF and Ordinary Braced Frames are permitted as follows:**

a) **Steel IMRF are permitted for structural systems 35 feet or less in height and the dead load of the roof, walls or floors not exceeding 35 psf each; or for single-story buildings 60 feet or less in height with the dead load of the roof or walls not exceeding 15 psf each where the moment joints of field connections are constructed of bolted end plates; or single-family dwellings using light frame construction with R = 3.0 and Ω_o = 2.2.**
b) **Steel OMRF are permitted for buildings 35 ft or less in height with the dead load of the roof, walls or floors not exceeding 15 psf each; or single-story buildings 60 ft or less in height with the dead load of the roof or walls not exceeding 15 psf each and where the moment joints of field connections are constructed of bolted end plates.**
c) **Steel Ordinary Braced Frames are permitted for structural systems 35 ft or less in height; or penthouse structures; or single-story buildings 60 ft or less in height with the dead load of the roof or walls not exceeding 15 psf each.**

[7] **Total height of the building including cantilevered columns.**
[8] **Prohibited in Seismic Zones 2A, 2B, 3 and 4. See Section 1633.2.7.**

Recommendation: Approve as Amendment

Reason for amendment:

The proposal allows the use of Ordinary Moment Frames and Intermediate Moment frames with certain limitations on height and dead load.

Editorially revise/update table to make it consistent with the adoption of 1997 AISC-Seismic Provisions and the latest Supplements. These provisions are fundamentally updated from previous editions. It has incorporated to the extent possible, most recent findings from the FEMA funded SAC Reports.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:

Date: March 1, 2002

Item Number: 3
Code Section: 2204
Proposed Amendment (strikeout/underline format):

SECTION 2204-DESIGN METHODS

Design shall be by one of the following methods.

2204.1 Load and Resistance Factor Design. Steel design based on load and resistance factor design method shall resist the factored load combinations of section 1612.2 in accordance with the applicable requirements of section 2205. ~~Seismic design of structures, where required, shall comply with Division IV for structures design in accordance with Division II (LRFD)~~

2204.2 Allowable Stress Design. Steel design based on allowable stress design methods shall resist the factored load combinations of section 1612.3 in accordance with the applicable requirements of section 2205. ~~Seismic design of structures, where required, shall comply with Division V for structures designed in accordance with Division III (ASD)~~

Recommendation: Approve

Reason for amendment:

Editorially revise/update table to make it consistent with the adoption of 1997 AISC-Seismic Provisions and the latest Supplements. These provisions are fundamentally updated from previous editions. It has incorporated to the extent possible, most recent findings from the FEMA funded SAC Reports.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

TRICHAPTER UNIFORM CODES PROGRAM
2001 CBC AMENDMENTMENTS AND INTERPRETATION

Proposed by Code Interpretation Committee:
Date: March 1, 2002
Item Number: 4
Code Section: 2210 & 2211
Proposed Amendment (strikeout/underline and Delete/Add format):

2205.3 Seismic Design Provisions for Structural Steel. Steel structural elements that resist seismic forces shall, in addition to the requirements of Section 2205.2 be designed in accordance with Division IV ~~or V~~.

Seismic Design Provisions for Structural Steel.

The text of UBC section 2205.3 is deleted and replaced with the following:

> **2205.3 Seismic Design Provisions for Structural Steel**. Steel structural elements that resist seismic forces shall, in addition to the requirements of Section 2205.2 be designed in accordance with Division IV.

Modification of Division IV and V of Chapter 22 of the California Building Code

Division IV of Chapter 22 of the California Building Code is deleted and replaced with the following:

> **Division IV — SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS**
>
> **Based on Seismic Provisions for Structural Steel Buildings, of the American Institute of Steel Construction. Parts I and III, dated April 15, 1997and Supplement No. 2, dated November 10, 2000.**
>
> **2210 — Adoption**
>
> Except for the modifications as set forth in Sections 2211 and 2212 of this division and the requirements of the Building Code, the seismic design, fabrication, and erection of structural steel shall be in accordance with the *Seismic Provisions for Structural Steel Buildings*, April 15, 1997 published by the American Institute of Steel Construction, 1 East Wacker Drive, Suite 3100, Chicago, IL 60601, as if set out at length herein. The adoption of *Seismic Provisions for Structural Steel Buildings* in this Division, hereinafter referred to

as AISC-Seismic, shall include Parts I (LRFD), and III (ASD). and Supplement No. 2, dated November 10, 2000.

Where other codes, standards, or specifications are referred to in this specification, they are to be considered as only an indication of an acceptable method or material that can be used with the approval of the Building Official.

2211 – Design Methods

When the load combinations from Section 1612.2 for LRFD are used, structural steel buildings shall be designed in accordance with Chapter 22 Division II (AISC-LRFD) and Part I of AISC-Seismic as modified by this Division.
When the load combinations from Section 1612.3 for ASD are used, structural steel buildings shall be designed in accordance with Chapter 22 Division III (AISC-ASD) and Part III of AISC-Seismic as modified by this Division.

2212 - Amendments

The AISC-Seismic adopted by this Division apply to the seismic design of structural steel members except as modified by this Section.

a) The following terms that appear in AISC-Seismic shall be taken as indicated in the 1997 Uniform Building Code.

AISC-Seismic	**1997 Uniform Building Code**
Seismic Force Resisting System	Lateral Force Resisting System
Design Earthquake	Design Basis Ground Motion
Load Combinations Eqs. (4-1) and (4-2)	Chapter 16 Eqs. (12-17) and (12-18) respectively
LRFD Specification Section Eqs. (A4-1) through (A4-6)	Chapter 16 Eqs. (12-1) through (12-6) respectively
$\varsigma_o Q_E$	E_m

b) The text of section 1 of Part 1 of the AISC Seismic Provisions is deleted and replaced with the following:

1. Scope

These provisions are intended for the design and construction of structural steel members and connections in the Seismic Force Resisting Systems in buildings for which the design forces resulting from earthquake motions have been determined on the basis of various levels of energy dissipation in the inelastic range of response. These provisions shall apply to buildings in Seismic Zone 2 with an importance factor I greater than one, in Seismic Zone 3 and 4 or when required by the Engineer of Record.

These provisions shall be applied in conjunction with, Chapter 22, Division II, hereinafter referred to as the LRFD Specification. All members and connections in the Lateral Force Resisting System shall have a design strength as provided in the LRFD Specification to resist load combinations 12-1 through 12-6 (in Chapter 16) and shall meet the requirements in these provisions.

Part I includes a Glossary, which is specifically applicable to this Part, and Appendix S.

c) Section 4.1. of Part 1, first paragraph of the AISC Seismic Provisions is deleted and replaced as follows:

4.1 Loads and Load Combinations

The loads and load combinations shall be those in Section 1612.2 except as modified throughout these provisions.

E_h is the horizontal component of earthquake load E required in Chapter 16. Where required in these provisions, an amplified horizontal earthquake load $\Omega_o E_h$ shall be used in lieu of E_h as given in the load combinations below. The term Ω_o is the system overstrength factor as defined in chapter 16. The additional load combinations using amplified horizontal earthquake load are:

$$1.2\,D + 0.5\,L + 0.2S + \Omega_o E_h \qquad (4\text{-}1)$$

$$0.9\,D + \Omega_o E_h \qquad (4\text{-}2)$$

Exception: the load factor on L in load combination 4-1 shall be equal to 1.0 for garages, areas occupied ass places of public assembly and all areas where the live load is greater than 100 psf.

Orthogonal earthquake effects shall be included in the analysis as required in section 1633.1, except that, when consideration of the load $\Omega_o E_h$ is required, orthogonal earthquake effects need not be considered.

24.03.740 Deletion of Division V of Chapter 22 of the California Building Code

Division V of Chapter 22 of the California Building Code is hereby deleted.

Recommendation: Approve

Reason for amendment:

The current 97 UBC edition is based on the outdated 1992 AISC Seismic provisions. The proposal makes the CBC provisions consistent with the current practice which is based on the 1997 AISC Seismic with the 2 subsequent Supplements printed afterward.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:

Date: March 1, 2002
Item No.: 5
Code Section: 1612.2.1

1612.2.1 Basic load combinations. Where Load and Resistance Factor Design (Strength Design) is used, structures and all portions thereof shall resist the most critical effects from the following
combinations of factored loads:

1.*4D*	(12-1)
1.*2D* + 1.6*L* + 0.5 (*L_r* or *S*)	(12-2)
1.*2D* + 1.6 (*L_r* or S) + (*f_1 L* or 0.8 *W*)	(12-3)
1.*2D* + 1.*3W* + (*f_1 L* + 0.5 (*L_r* or *S*)	(12-4)
1.*2D* + 1.0*E* + (*f_1 L* + f_2 *S*)	(12-5)
~~0.*9D* ± (1.*0E* or 1.*3W*)~~	~~(12-6)~~
0.*9D* ± (1.0*?E_h* or 1.*3W*)	(12-6)

WHERE:
f_1 = 1.0 for floors in places of public assembly, for live loads in excess of 100 psf (4.9 kN/m^2), and for garage live load.
= 0.5 for other live loads.
f_2 = 0.7 for roof configurations (such as saw tooth) that do not shed snow off the structure.
= 0.2 for other roof configurations.
EXCEPTIONS: 1. Factored load combinations for concrete per Section 1909.2 where load combinations do not include seismic forces.
2. ~~Factored load combinations of this section multiplied by 1.1 for concrete and masonry where load combinations include seismic forces.~~
~~3.~~ Where other factored load combinations are specifically required by the provisions of this code.

Recommendation: Approve

Reason for amendment:

a. To avoid reduction of the vertical seismic component (E_v) by 0.9D which was not the intent of considering the vertical component in seismic calculations.

b. To delete exception item 2 regarding the1.1 factor for concrete and masonry. The need for eliminating this factor has been well documented in many engineering and trade journals as well as in 1999 SEAOC Blue Book Commentary C101.7.1 (page. 85)

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:

Date: March 1, 2002

Item Number: 6 (previously No. 12)
Code Section: 1630.8.2
Proposed Amendment (strikeout/underline format):

1630.8.2.2 Detailing requirements in Seismic Zones 3 and 4. In Seismic Zones 3 and 4, elements supporting discontinuous systems shall meet the following detailing or member limitations:

1. Reinforced concrete or reinforced masonry elements designed primarily as axial-load members shall comply with Section 1921.4.4.5.

2. Reinforced concrete elements designed primarily as flexural members and supporting other than light-frame wood shear wall systems or light-frame steel and wood structural panel shear wall systems shall comply with Sections 1921.3.2 and 1921.3.3. Strength computations for portions of slabs designed as supporting elements shall include only those portions of the slab that comply with the requirements of these Sections.

3. Masonry elements designed primarily as axial-load carrying members shall comply with Sections 2106.1.12.4, Item 1, and 2108.2.6.2.6.

4. Masonry elements designed primarily as flexural members shall comply with Section 2108.2.6.2.5.

5. ~~Steel elements designed primarily as axial-load members shall comply with Sections 2213.5.2 and 2213.5.3.~~ Not Adopted.

6. Steel elements designed primarily as flexural members or trusses shall have bracing for both top and bottom beam flanges or chords at the location of the support of the discontinuous system and shall comply with the requirements of ~~Section 2213.7.1.3.~~ AISC-Seismic Part I, Section 9.4b.

Recommendation: Approve

Reason for amendment:

a. The provision is adopted in AISC-Seismic 97 Part I, Section 8.3 and applicable to all axial loaded members. Redundant.
b. Old section is no longer applicable. Replace with provision in the AISC-Seismic.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:

Date: March 1, 2002

Item Number: 7 (previously No. 15)
Code Section: 1630.10.2
Proposed Amendment (strikeout/underline format):

1630.10.2 Calculated. Calculated story drift using $?_M$ shall not exceed 0.025 times the story height for structures having a fundamental period of less than 0.5~~7~~ second. For structures having a fundamental period of 0.5~~7~~ second or greater, the calculated story drift shall not exceed $0.020/T^{1/3}$ times the story height.

(Note: Exceptions to remain unchanged)

1630.10.3 Limitations. The design lateral forces used to determine the calculated drift may disregard the limitations of Formula (30-6) *and (30-7) (Errata Mar. 2001)* and may be based on the period determined from Formula (30-10) neglecting the 30 or 40 percent limitations of Section 1630.2.2, Item 2.

(Note: 1630.10.3 shown for information only with no change.)

Recommendation: Approve

Reason for amendment:

The proposal corrects a much significant deficiency in the 97 UBC, which eliminated any minimum base shear from consideration when checking for building drift.

After engineers began using the ’97 UBC they found problems with applying (30-7) for the drift calculations. (30-7) applies only to Zone 4 and was added after the Northridge Earthquake to account for near fault pulses. An erratum to ’97 UBC Section 1630.10.3 was issued in March 2001, 3 years following publication, that deleted (30-7) from being applied to drift calculations. However, SEAOC Seismology Committee found that the erratum actually made the drift limit to be less stringent and would allow more slender and flexible buildings than were allowed under the ’94 UBC.

The proposed modification was recommended by SEAOC Seismology Committee. It effectively makes the descending branch vary with $1/T^{2/3}$ for drift coordination purposes and make the drift limitations very similar to those of the ‘94 UBC.

The change from 0.7 seconds to 0.5 seconds in the proposal is needed to avoid a step function in the drift limit. If 0.7 second were retained, the drift limit at T just below 0.7 seconds would have been different from the drift limit just above 0.7 seconds. With the switch to 0.5 seconds, the drift limit just below T=0.5 seconds is the same as the drift limit just above T=0.5 seconds

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

Proposed by Code Interpretation Committee:

Date: March 1, 2002

Item Number: 8 (previously No. 16)
Code Section: 2316
Proposed Amendment (strikeout/underline format):

Division III-DESIGN SPECIFICATIONS FOR ALLOWABLE STRESS DESIGN OF WOOD BUILDINGS

Part I-ALLOWABLE STRESS DESIGN OF WOOD

This standard, with certain exceptions, is the ANSI/NFoPA ~~NDS-91~~ NDS-97 National Design Specification for Wood Construction of the American Forest and Paper Association, ~~Revised 1991~~ 1997 Edition, and the Supplement to the ~~1991~~ 1997 Edition, National Design Specification, adopted by reference.

The National Design Specification for Wood Construction, ~~Revised 1991~~ 1997 Edition, and supplement are available from the American Forest and Paper Association, 1111 19th Street, NW, Eighth Floor, Washington, DC, 20036.

SECTION 2316 - DESIGN SPECIFICATIONS 2316.1 Adoption and Scope. The National Design Specification for Wood Construction, ~~Revised 1991~~ 1997 Edition (NDS), which is hereby adopted as a part of this code, shall apply to the design and…….

Also:

2316.2 Amendments.

…… Section 12 of Section 2316.2 is deleted and replaced with the following:

12. Sec. 3.2.3.3. Add to end of paragraph as follows: Cantilevered portions of beams less than 4 inches (102 mm) in nominal thickness shall not be notched unless the reduced section properties and lumber defects are considered in the design. For effects of notch on shear strength, see Section 3.4.4

b. Section 14 of Section 2316.2 is deleted.

c. Section 26 of Section 2316.2 is deleted.

d. Section 27 of Section 2316.2 is deleted.

Recommendation: Approve

Reason for amendment:

The 1991 NDS is an outdated specification, which is more than 10 years old. Since the adoption of 97 UBC the NDS has published the 1997 specifications, which incorporates many of them items that were added since publication of 1991 NDS and it is also in a more user friendly format.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mines and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

Recommendations:

Use as Amendment

TRICHAPTER UNIFORM CODES PROGRAM
2001 CBC AMENDEMENTS AND INTERPRETATION

Proposed by Code Interpretation Committee:

Date: April 9, 2002

Item Number: 9 (previously No. 17)
Code Section: 2320.11.3
Proposed Amendment (strikeout/underline format):

SECTION 2320.11.3: CONVENTIONAL CONSTRUCTION PROVISIONS (BRACING)

1997 UBC SECTION 2320.11.3, ITEMS 5 & 7 ARE AMENDED AS FOLLOWS (NEW LANGUAGE IS UNDERLINED):

Delete 1997 UBC Section 2320.11.3, Item 5 which allows the use of gypsum board for bracing

Amend 1997 UBC Section 2320.11.3, Item 7 as follows:

Portland cement plaster on studs spaced 16 inches on center installed in accordance with Table No. 25-1. Limited to one story structure of R-3 and U-1 occupancies.

Recommendation: Approve

Reason for amendment:

GYPSUM WALLBOARD AND EXTERIOR PORTLAND CEMENT PLASTER HAVE PERFORMED POORLY DURING RECENT CALIFORNIA SEISMIC EVENTS. THE SHEAR VALUES OF GYPSUM WALLBOARD AND PORTLAND CEMENT STUCCO CONTAINED IN THE CODE ARE BASED ON MONO-DIRECTIONAL TESTING. IT IS APPROPRIATE TO LIMIT THE USE OF THESE PRODUCTS UNTIL CYCLIC LOAD TESTING ARE PERFORMED AND EVALUATED.

Findings (based upon local geologic, topographic or climatic conditions):

The amendment is needed due to local geological conditions.

The San Francisco Bay area region is densely populated and/or located in an area of high seismic activities as indicated by United States Geological Survey and California Division of Mine and Geology. Recent earthquake activities, including the 1989 Loma Prieta earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.